

Message

From: Healey, John [healey.john@epa.gov]
Sent: 10/16/2020 7:24:52 PM
To: Pierce, Maggie [Pierce.Maggie@epa.gov]; Sengco, Mario [Sengco.Mario@epa.gov]
CC: Wirick, Holiday [wirick.holiday@epa.gov]; Wilcut, Lars [Wilcut.Lars@epa.gov]; Fleisig, Erica [Fleisig.Erica@epa.gov]
Subject: RE: ALC metals fraction
Attachments: RE: A couple of questions re: North Dakota's hardness-dependent criteria

Hi Maggie,

I sent the attached message to Mario on October 6th, which he might have shared with Holly. I suspect that Lars or Erica might be able to clear things up, based on their knowledge of the metals criteria.

My understanding is that dissolved metals are calculated in one of two ways, depending on whether or not they are considered *hardness-dependent*. Because the metals listed in [Appendix B](#) are a subset of those listed in [Appendix A](#), it appears that there is some discretion regarding whether or not the criteria may be expressed as *total* or *dissolved* (i.e., discretion whether or not to apply the conversion factor for those metals listed in Appendix B). I added short responses to your questions in your message, below, but I'd recommend waiting to see if Lars or Erica have anything to add or clarify.

Lars and Erica, when you're back in the office could you please weigh in on this issue?

John

From: Pierce, Maggie <Pierce.Maggie@epa.gov>
Sent: Friday, October 16, 2020 1:29 PM
To: Sengco, Mario <Sengco.Mario@epa.gov>; Healey, John <healey.john@epa.gov>
Cc: Wirick, Holiday <wirick.holiday@epa.gov>
Subject: ALC metals fraction

Hi Mario and John,

I was recently discussing hardness-dependent ALC metals with Holly and wanted to clarify a couple things. My understanding is that metals ALC are recommended to be implemented for the dissolved fraction. Because the tox data underpinning the criteria are in the total form, a conversion factor is necessary for all metal ALC (both hardness-dependent and not – except Al and maybe Fe).

- 1) Is EPA's recommendation still for all aquatic life metals criteria to be in the dissolved form (consistent with [this memo](#) and the [notes in the NRWQC column](#))? Has anything changed? (My take is that ALC for the total form could be scientifically defensible and approvable but are not recommended.) This issue came up in some discussion regarding the aluminum aquatic life criteria, which are expressed as total but some states wanted to express as the dissolved (bioavailable) form only. Lars may have more insight into this issue.
- 2) Accordingly, do we still recommend the hardness-dependent criteria for freshwaters incorporate the conversion factors identified in [Appendix B of our NRWQC website](#)? Yes, I think we would still recommend this.

Thanks,
Maggie

Maggie Pierce
Water Quality Section
EPA Region 8

303-312-6550 (rolls over to my cell)